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**HISTORICAL AND ACTUAL PRESENCE OF THE GIANT OTTER
(*Pteronura brasiliensis*) ON THE LOWER META RIVER, DEPARTMENT OF
CASANARE - COLOMBIA ORINOQUIA**

Hernán Javier Díaz¹ and Iván M. Sánchez²

¹Universidad Nacional de Colombia, sede Leticia- Amazonas. e-mail: hjdiazp@unal.edu.co A.A. 12395 Bogotá, Colombia

²Universidad Nacional de Colombia. A.A. 33887 Bogotá, Colombia

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Abstract: There has been little information published about the distribution of giant otters (*Pteronura brasiliensis*) in Colombia, and recent distribution maps have failed to include the Department of Casanare as having giant otters present. Some ancient chronicles, however, record giant otter occurrence in the Colombian Orinoquia, as well as the value of its skin. It is believed that since 1974, when the commerce of skins ceased in Colombia, populations of this species have recuperated in this area. In this paper we confirm the presence of giant otters in this part of the country, and provide identification of individuals sighted through neck patterns.

INTRODUCTION

Unfortunately, information on the distribution and status of giant otter (*Pteronura brasiliensis*) populations in Colombia is fragmented, despite being considered Critically Endangered (RODRIGUEZ, 1998) or Endangered (HILTON-TAYLOR, 2000) and being included in Appendix I of CITES. Distribution maps published to date by CHEHEBAR (1990), CARTER and ROSAS (1997), EMMONS (1997) and SCHENCK (1999) fail to include the Department of Casanare as part of the species' distribution range. In the Colombian mammals list, published by ALBERICO et al. (2000), the presence of *P. brasiliensis* is recorded in the Amazonía (Department of Amazonas) and Orinoquia regions (Departments of Arauca, Vaupés and Vichada), but fails to include the Department of Casanare.

Several studies have provided valuable data on the ecology of the giant otter in different areas of Colombia. DEFLER (1983, 1986) undertook censuses along 1750 km of fluvial system at the Natural National Park El Tuparro in the Department of Vichada, finding 163 individuals in 30 groups. MARTINEZ (1998) found 40 sites used by the species and she observed 2 groups and 3 solitary individuals in the River Meta and small tributaries of the River Caquetá in the Department of Amazonas. VALBUENA (1999) determined the population size in the low river basin of the Bitá river in the Department of Vichada and found a mean density of 0.8 individuals/km². GÓMEZ (1999) characterized the foraging ecology of the species in the same area as VALBUENA (1999), through faecal analysis and direct observation of individuals feeding. BOTELLO (2000) studied the ecology and behaviour of the species in the low Apoporis river, Colombian Amazonia, and found a density of 0.8 otters/km of river. BOTELLO (pers. comm.) is currently monitoring populations he previously observed (BOTELLO, 2000) in the low Apoporis river.

Chroniclers and missionaries accompanying Spanish conquistadors during the Conquest and subsequent colonisation often documented the presence of fauna in the Colombian Orinoquia region. One of those chroniclers, R.P. Joseph Gumilla (GUMILLA, 1791), recorded the presence of the giant otter and the quality of its skin: "In Arauca, Apure, Duya, Cravo and many other rivers draining to the

Orinoco river, there are lots of wolves or water dogs, as large as a hunting dog; they are otters, but the subtlety and smoothness of the water dog's hair, called "guacbi" by the Indians, exceeds by far that of the otter's skin, and the smooth touch of silk. They swim with great lightness and they eat fish; they live in the water as well as on land, although they always go to the river to eat...". The R.P. Felipe Salvador Gilij (Biocolombia 1996) accurately describes the presence of the giant otter in the region: "In waters of the Orinoco river, and a lot more in neighbouring lakes and rivers, there are certain animals similar to dogs. In fact, the Spaniards call it water dog. They are as large as dogs and they even bark like them. Its fur has a reddish and black colour, it is smooth to touch and universally valued...". In the canon José Cortés de Madariaga's voyage diary of 1811, appears a reference regarding the occurrence of the species in a tributary of the Metá river: "In the passage of Rionegro river I did not find any rational creature...; I only saw some tapirs and baquiras (Peccary) crossing the river, a diverse multitude of aquatic wolves, snakes and a diversity of fishes..." (reported in VELANDIA, 1992).

This type of historical chronicle is useful for getting an idea of the possible changes in the distribution of this species due to habitat destruction or action of excessive hunting pressure.

Between 1950 and 1975, the species was overexploited for the value of its skin. Before this period, it is believed that giant otters were widely distributed in the rivers, streams and lagoons of the Orinoco and Amazonas River basins, in the geographical regions known as Orinoquia (Llanos Orientales) and Amazonia (DONADIO, 1978, HERNANDEZ-CAMACHO, pers. comm.). It is believed that after 1973, when hunting was prohibited, and after 1974, when the commerce for skins ceased in this country (DONADIO, 1978), populations of this species have recuperated. Currently, there is little information published about the zones in which the species remains and in which it has recuperated.

In order to increase information about the distribution and the actual status of this species in Colombia, we present data collected during a visit to a sector of the Casanare Department (Colombian Orinoquia). Through this, we confirm its presence in this zone of the country and we provide a basis for future studies.

STUDY AREA

The area studied was located around and in the La Lorena Herd (Property of the Yamato Foundation), near the Village of La Hermosa (5°32'30"N - 70°26'36"W), in Paz de Ariporo, Casanare Department, Colombia (Fig. 1). Its physio-geography corresponds with the Poorly-Drained Orinoquia, whose topography is plane and plane-concave, having savannas crossed by streams and lagoons. Drainage is poor and floods occur in the rainy season (CORTES, 1986, SARMIENTO, 1994). According to the Ramsar Convention classification of Natural Wetlands (NARANJO et al. 1999), these habitats are part of the fluvial system and flooded savannas of the Metá River.

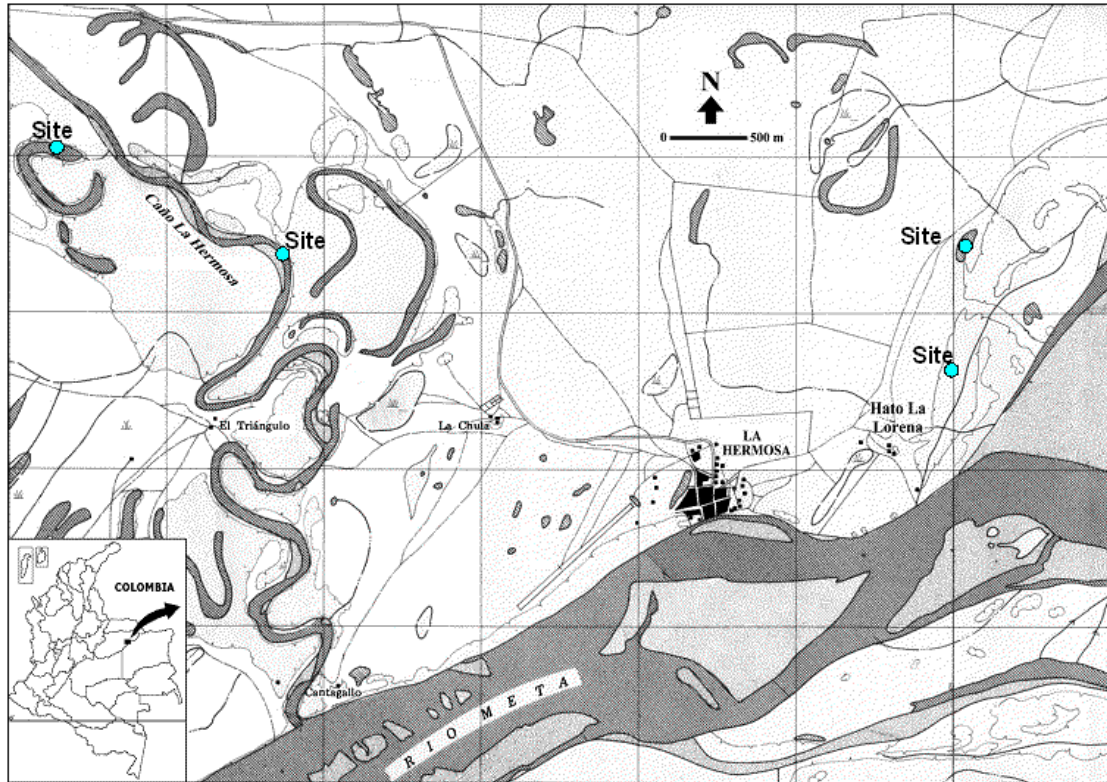


Figure 1: Location of the study area. Department of Casanare, Colombia. Blue dots correspond to places visited.

METHODS

In March 1999, during the dry season (low waters), in order to confirm the presence of this species, preliminary data were collected over 10 days, surveying approximately 50 ha of riparian forest. These preliminary surveys were relatively random, in that we visited sites suggested by local people, rather than undertaking a standard survey method. In such places we established fixed points for direct observations using a video camera, and we explored the area to locate campsites of the otters. Total time of observation of giant otters was 51 min. 15 sec. In addition, we carried out interviews with those persons that had had some interaction with the species, in order to assess the relationship of local people to the otters.

RESULTS AND DISCUSSION

We visited a forest patch (approximately 17 ha.) located 2 km from La Hermosa village, where we found a small seasonal lagoon (Site A, Fig. 1). We observed two adult otters fishing and eating in the water from a fixed point for a period of 5 min 35 sec. One of the otters was identified by its pattern of neck spots (Fig. 2a and 3a). The next day, we visited a different lagoon, approximately 1.25 ha in area (Site B, Fig. 1).

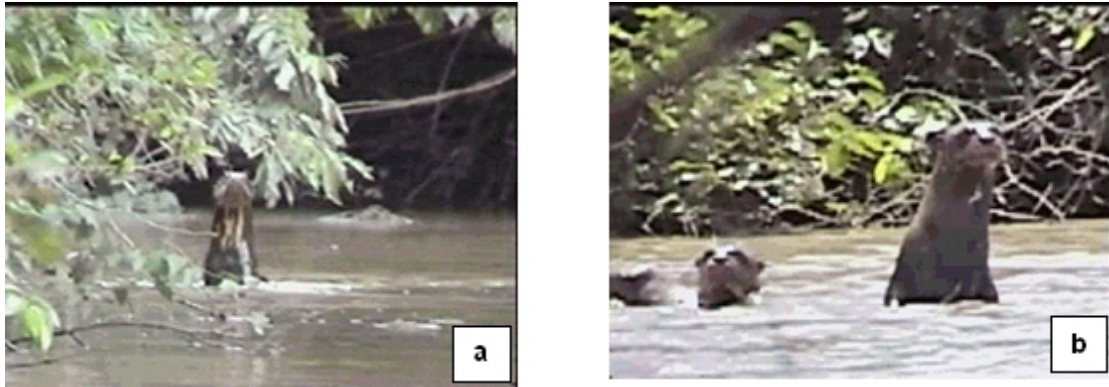


Figure 2: Otters sighted in a) Site A, and b) Site B. Department of Casanare, Colombia.

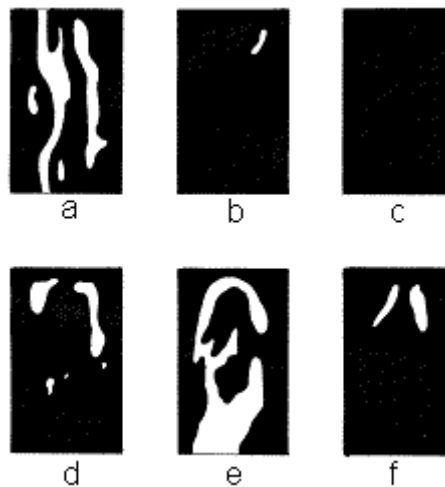


Figure 3: Neck patterns of otters sighted, a) Site A. b-f) Site B. Department of Casanare, Colombia.

There, from a fixed point, we observed a family group of giant otters, composed of eight individuals, two of which were identified as cubs, for 38 min 8 sec. The group was moving over a small area and fishing and eating close to the lagoon's border, where we located its campsite. On a second day, this group was observed from a boat for 7 minutes in the same place. Using a video camera, we were able to identify five of the eight individuals by the pattern of spots on the neck (Fig. 2b and 3b, c, d, e, f). In addition, we visited some sites around the La Hermosa stream at Site C (Fig. 1), where we explored approximately 250 m of the stream course; however, no sign of giant otters was found. At Site D (Fig. 1), we found old otter campsites in a lagoon of approximately 25 ha). Local inhabitants reported that otters had recently been present at this site.

A total of seven interviews were made. With the information collected we obtained an idea of the human-otter-habitat interaction. We were able to highlight four main negative interactions between otters and humans that might affect the otters' continued recuperation in the Department of Casanare:

- a. Sometimes people shoot them, or shoot at them to frighten them away, as they consider that all otters eat their fishes.
- b. Forest destruction for logging and cultivation has increased the pressure on the otter's habitat.
- c. Sometimes people hunt them to use its skin to manufacture articles such as clothing.
- d. People capture cubs to keep them as pets.

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RÉSUMÉ: PRÉSENCE ACTUELLE ET HISTORIQUE DE LA LOUTRE GÉANTE (*Pteronura brasiliensis*) SUR LE COURS INFÉRIEUR DU RIO META, DÉPARTEMENT DE CASANARE -VERSANT COLOMBIEN DU BASSIN DE L'ORÉNOQUE.

Peu d'informations ont été publiées concernant la répartition des loutres géantes (*Pteronura brasiliensis*) en Colombie. Quelques archives anciennes rapportent la présence de l'espèce sur le versant colombien de l'Orénoque, ainsi que la valeur de sa fourrure. On considère que depuis 1974, lorsque le commerce des fourrures a cessé dans le pays, les populations de loutres ont spontanément repris. Ce présent article vise à confirmer la présence des loutres géantes dans cette partie du pays, et à préciser l'identification des individus par l'observation des taches de la nuque.

RESUMEN: PRESENCIA ACTUAL E HISTÓRICA DE LA NUTRIA GIGANTE (*Pteronura Brasiliensis*) EN EL BAJO RÍO META, DEPARTAMENTO DE CASANARE - ANTIOQUÍA COLOMBIANA.

Hay poca información publicada sobre la distribución de las nutrias gigantes (*Pteronura brasiliensis*) en Colombia. Algunas crónicas antiguas reportan la ocurrencia de la nutria gigante en la Antioquía colombiana así como el valor de su piel. Se cree que desde 1974, cuando el comercio de pieles en el país cesó, las poblaciones de esta especie se han ido recuperado. En esta nota queremos confirmar la presencia de nutrias gigantes en esa parte del país, y brindar información sobre los individuos identificados a través del patrón de manchas en su cuello.